This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A compound of Formulas I, II, III, or IV:

wherein

A is an indazolyl, benzothiazolyl, or isobenzothiazolyl group according to subformulas (a) to (c), respectively,

(a)
$$R^1$$
 N R^2

(b)
$$R^3$$
 R^5 or

X is O or S;

- R¹ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, cycloalkylalkoxy having 4 to 7 carbon atoms, alkylthio having 1 to 4 carbon atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydroxyalkyl having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group independently has 1 to 4 carbon atoms, Ar or Het;
- R² is H, alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, or cycloalkylalkyl having 4 to 7 carbon atoms;
- R³ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, cycloalkylalkoxy having 4 to 7 carbon atoms, alkylthio having 1 to 4 carbon atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydroxyalkyl having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group independently has 1 to 4 carbon atoms, Ar or Het;
- R⁴ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, cycloalkylalkoxy having 4 to 7 carbon atoms, alkylthio having 1 to 4 carbon atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydoxyalkyl having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group

independently has 1 to 4 carbon atoms, Ar or Het;

R⁵ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, cycloalkylalkoxy having 4 to 7 carbon atoms, alkylthio having 1 to 4 carbon atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group independently has 1 to 4 carbon atoms, Ar or Het;

Ar is an aryl group containing 6 to 10 carbon atoms which is unsubstituted or substituted one or more times by alkyl having 1 to 8 C atoms, alkoxy having 1 to 8 C atoms, halogen, dialkylamino wherein the alkyl portions each have 1 to 8 C atoms, amino, cyano, hydroxyl, nitro, halogenated alkyl having 1 to 8 C atoms, halogenated alkoxy having 1 to 8 C atoms, hydroxyalkyl having 1 to 8 C atoms, hydroxyalkoxy having 2 to 8 C atoms, alkenyloxy having 3 to 8 C atoms, alkylthio having 1 to 8 C atoms, alkylsulphinyl having 1 to 8 C atoms, alkylsulphonyl having 1 to 8 C atoms, monoalkylamino having 1 to 8 C atoms, cycloalkylamino wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, arylthio wherein the aryl portion contains 6 to 10 carbon atoms and is optionally substituted, cycloalkyloxy wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, cycloalkyloxy wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, sulfo, sulfonylamino, acylamido, acyloxy or combinations thereof; and

Het is a heterocyclic group, which is fully saturated, partially saturated or fully unsaturated, having 5 to 10 ring atoms in which at least 1 ring atom is a N, O or S atom, which is unsubstituted or substituted one or more times by halogen, aryl having 6 to 10 carbon atoms and is optionally substituted, alkyl having 1 to 8 C atoms, alkoxy having 1

to 8 C atoms, cyano, trifluoromethyl, nitro, oxo, amino, monoalkylamino having 1 to 8 C atoms, dialkylamino wherein each alkyl group has 1 to 8 C atoms, or combinations thereof; or

a pharmaceutically acceptable salt thereof,

wherein when said compound is of Formula I the indazolyl group of group A is attached via its 3, 4, or 7 position, the benzothiazolyl group of group A is attached via its 4 or 7 position, or the isobenzothiazolyl group of group A is attached via its 3, 4, or 7 position.

2. (Original) A compound according to claim 1, wherein said compound is of formulas Ia, Ib, Ie, If, Ii, Ij, Ik, or Io:

$$\begin{array}{c|c}
N & X \\
N & X \\
N & N \\
N & N \\
N & N \\
N & N \\
N & X
\end{array}$$
(If) (Iii)

3. (Original) A compound according to claim 1, wherein said compound is of formula IIa to IIo:

4. (Original) A compound according to claim 1, wherein said compound is of formula IIIa to IIIo:

5. (Original) A compound according to claim 1, wherein said compound is of formula IVa to IVo:

6. (Original) A compound according to Formulae I' - IV':

wherein

A is an indazolyl or benzothiazolyl according to subformulas (a) to (b), respectively,

(a)
$$R^1$$
 N or R^2

(b)
$$R^3$$
 N

- R¹ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, alkylthio having 1 to 4 carbon atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydoxyalkyl having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group independently has 1 to 4 carbon atoms, Ar or Het;
- R² is H, alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, or cycloalkylalkyl having 4 to 7 carbon atoms;
- R³ is H, F, Cl, Br, I, OH, CN, nitro, NH₂, alkyl having 1 to 4 carbon atoms, fluorinated alkyl having 1 to 4 carbon atoms, cycloalkyl having 3 to 7 carbon atoms, cycloalkylalkyl having 4 to 7 carbon atoms, alkoxy having 1 to 4 carbon atoms, cycloalkoxy having 3 to 7 carbon atoms, alkylthio having 1 to 4 carbon MEMORY-33

atoms, fluorinated alkoxy having 1 to 4 carbon atoms, hydoxyalkyl having 1 to 4 carbon atoms, hydroxyalkoxy having 2 to 4 carbon atoms, monoalkylamino having 1 to 4 carbon atoms, dialkylamino wherein each alkyl group independently has 1 to 4 carbon atoms, Ar or Het;

Ar is an aryl group containing 6 to 10 carbon atoms which is unsubstituted or substituted one or more times by alkyl having 1 to 8 C atoms, alkoxy having 1 to 8 C atoms, halogen, dialkylamino wherein the alkyl portions each have 1 to 8 C atoms, amino, cyano, hydroxyl, nitro, halogenated alkyl having 1 to 8 C atoms, halogenated alkoxy having 1 to 8 C atoms, hydroxyalkyl having 1 to 8 C atoms, hydroxyalkoxy having 2 to 8 C atoms, alkenyloxy having 3 to 8 C atoms, alkylthio having 1 to 8 C atoms, alkylsulphinyl having 1 to 8 C atoms, alkylsulphonyl having 1 to 8 C atoms, monoalkylamino having 1 to 8 C atoms, cycloalkylamino wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, aryloxy wherein the aryl portion contains 6 to 10 carbon atoms and is optionally substituted, cycloalkyloxy wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, cycloalkyloxy wherein the cycloalkyl group has 3 to 7 C atoms and is optionally substituted, sulfo, sulfonylamino, acylamido, acyloxy or combinations thereof; and

Het is a heterocyclic group, which is fully saturated, partially saturated or fully unsaturated, having 5 to 10 ring atoms in which at least 1 ring atom is a N, O or S atom, which is unsubstituted or substituted one or more times by halogen, aryl having 6 to 10 carbon atoms and is optionally substituted, alkyl having 1 to 8 C atoms, alkoxy having 1 to 8 C atoms, cyano, trifluoromethyl, nitro, oxo, amino, monoalkylamino having 1 to 8 C atoms, dialkylamino wherein each alkyl group has 1 to 8 C atoms, or combinations thereof; or

a pharmaceutically acceptable salt thereof.

7. (Original) A compound according to claim 6, wherein said compound is of formula I'a, Ib, Ie, If, ot Ii:

8. (Original) A compound according to claim 6, wherein said compound is of formula II'a to II'i:

NH NH NH NH
$$R^1$$
 R^2 (II'b) R^2 (II'c) MEMORY-33

9. (Original) A compound according to claim 6, wherein said compound is of formula III'a to III'ii:

10. (Original) A compound according to claim 6, wherein said compound is of formula IV'a to IV'i:

- 11. (Previously Presented) A compound according to claim 1, wherein R¹ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl.
- 12. (Previously Presented) A compound according to claim 1, wherein R² is H, methyl, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl.
- 13. (Previously Presented) A compound according to claim 1, wherein R³ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl.
- 14 (Previously Presented) A compound according to claim 1, wherein R¹ is H, F, Cl, Br, methyl, methoxy, or amino.
 - 15. (Previously Presented) A compound according to claim 1, wherein R² is H or methyl.
- 16. (Previously Presented) A compound according to claim 1, wherein, and R³ is H, F, Cl, Br, methyl, methoxy, or amino.
- 17. (Previously Presented) A compound according to claim 1, wherein R⁴ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, phenyl, or methoxy.
 - 18. (Previously Presented) A compound according to claim 1, wherein R⁵ is H.
- 19. (Original) A compound according to claim 17, wherein R¹ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl, R² is H, methyl, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl, and R³ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl.
- 20. (Original) A compound according to claim 18, wherein R¹ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl, R² is H, methyl, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl, and R³ is H, F, Cl, Br, 2-thiophenyl, 3-thiophenyl, 3-furyl, or phenyl.

- 21. (Currently Amended) A compound according to claim 1, wherein said compound is selected from:
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide-hydrochloride,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3S) 1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide hydrochloride,
- N-(1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide,
- N-(-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide hydrochloride,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide,
- N ((3R) 1-Azabicyclo[2.2.2]oct 3-yl) 1H-indazole-3-carboxamide hydrochloride,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide hydrochloride,
- 1-Methyl-1H-Indazole-3-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl,
- (R) 1-Methyl-1H-Indazole-3-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl,
- (S) 1-Methyl-1H-Indazole-3-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(bromo)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(methoxy)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(bromo)-1H-indazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(cyclopropyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-2-yl)-1H-indazole-3-carboxamide,
- N ((3R) 1 Azabicyclo[2.2.2]oct 3 yl) 5 (thiophen 2 yl) 1H-indazole 3 carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(bromo)benzo[d]isothiazole-3-carboxamide,

- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-methoxybenzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(bromo)-1H-indazole-3-carboxamide,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-bromobenzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-cyclopropylbenzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(2-fluorophenyl)benzo[d]isothiazole-3-carboxamide,
- N-((3R) 1-Azabicyclo[2.2.2]oct 3-yl) 6-(2-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-fluorophenyl)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(4-fluorophenyl)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(4-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-furan-3-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3R) 1-Azabicyclo[2.2.2]oct-3-yl) 6 (3-furan-3-yl)benzo[d]isothiazole 3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(morpholin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-phenylbenzo[d]isothiazole-3-carboxamide,
- N ((3R) 1 Azabicyclo[2.2.2]oct 3 yl) 6 phenylbenzo[d]isothiazole 3 carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-3-yl)benzo[d]isothiazole-3-carboxamide,

- N ((3R)-1-Azabicyclo[2.2.2]oct 3 yl) 6 (pyridin-3-yl)benzo[d]isothiazole-3 carboxamide hydroformate.
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-4-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3R) 1-Azabicyclo[2.2.2]oct 3-yl) 6 (pyridin 4-yl)benzo[d]isothiazole 3 carboxamide hydroformate.
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)benzo[d]isothiazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(bromo)-1H-indazole-3-carboxamide,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-bromobenzo[d]isothiazole-3-carboxamide,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-cyclopropylbenzo[d]isothiazole-3-carboxamide,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(2-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(4-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(morpholin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-phenylbenzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-3-yl)benzo[d]isothiazole-3-carboxamide

hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)benzo[d]isothiazole-3-carboxamide,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(bromo)-1H-indazole-3-carboxamide,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(phenyl)-1H-indazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide,

N-((3R)-1-Azabicyclo[2,2,2]oct-3-yl)-N-(1H-indazol-3-ylmethyl)amine,

N-((3S)-1-Aza-bicyclo[2,2,2]oct-3-yl)-N-(1H-indazol-3-ylmethyl)amine,

N-((3R)-1-Aza-bicyclo[2.2.2]oct-3-yl)benzothiazole-4-carboxamide dihydrochloride,

N-((3S)-1-Aza-bicyclo[2.2.2]oct-3-yl)benzothiazole-4-carboxamide dihydrochloride,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-4-carboxamide,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)- 1H-indazole-4-carboxamide,

N-(1H-Indazol-4-yl)-1-azabicyclo[2,2,2]oct-3-ylcarboxamide,

N-(1-Azabicyclo[2,2,2]oct-3-yl)-N-(1H-indazol-4-ylmethyl)amine,

N-((3R)-1-Azabicyclo[2,2,2]oct-3-yl)benzothiazole-7-carboxamide hydrochloride,

N-((3S)-1-Azabicyclo[2,2,2]oct-3-yl)benzothiazole-7-carboxamide hydrochloride,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide,

N-((3R) 1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide hydrochloride,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide hydrochloride,

Benzothiazole-4-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl,

- (R) Benzothiazole-4-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl,
- (S) Benzothiazole-4-carboxamide, N-1-aza-bicyclo[2,2,2]oct-3-yl, 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-3-yl,
- (S) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-3-yl,
- (R) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-3-yl,
- (S) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-4-yl,
- (R) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-4-yl, 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-7-yl,
- (S) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-7-yl,
- (R) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, N-1H-indazol-7-yl, 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-4-yl,
- (S) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-4-yl,
- (R) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-4-yl, 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-7-yl,
- (S) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-7-yl,
- (R) 1-Aza-bicyclo[2,2,2]oct-3-ylcarboxamide, benzothiazol-7-yl,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-3-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-3-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-4-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-4-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-5-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-5-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-5-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-6-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-6-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-6-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-7-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-7-ylmethyl)-amine,

- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(1H-indazol-7-ylmethyl)-amine, (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-4-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-4-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-4-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-5-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-5-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-5-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-6-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-6-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-6-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-7-ylmethyl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-7-ylmethyl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-yl)-(benzothiazol-7-ylmethyl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-3-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-3-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-3-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-4-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-4-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-4-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-5-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-5-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-5-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-6-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-6-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-6-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-7-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-7-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(1H-indazol-7-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-4-yl)-amine,

- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-4-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-4-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-5-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-5-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-5-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-6-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-6-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-6-yl)-amine,
- (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-7-yl)-amine,
- (S) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-7-yl)-amine,
- (R) (1-Aza-bicyclo[2,2,2]oct-3-ylmethyl)-(benzothiazol-7-yl)-amine, and physiological salts thereof.
- 22. (Previously Presented) A pharmaceutical composition comprising a compound according to claim 1 and a pharmaceutically acceptable carrier.
- 23. (Previously Presented) A method of selectively activating/stimulating α -7 nicotinic receptors in a mammal wherein such activation/stimulation has a therapeutic effect, comprising administering to an animal in need thereof an effective amount of a compound according to claim 1.
- 24. (Previously Presented) A method of treating a patient suffering from psychotic diseases, neurodegenerative diseases involving a dysfunction of the cholinergic system, and conditions of memory and/or cognition impairment comprising administering to the patient an effective amount of a compound according to claim 1.
- 25. (Previously Presented) A method of treating a patient suffering from dementia and other conditions with memory loss comprising administering to the patient an effective amount of a compound according to claim 1.

- 26. (Previously Presented) A method of treating a patient suffering from memory impairment due to mild cognitive impairment due to aging, Alzheimer's disease, schizophrenia, Parkinson's disease, Huntington's disease, Pick's disease, Creutzfeld-Jakob disease, depression, aging, head trauma, stroke, CNS hypoxia, cerebral senility, or multiinfarct dementia comprising administering an effective amount of a compound according according to claim 1.
- 27. (Previously Presented) A method of treating and/or preventing dementia in an Alzheimer's patient comprising administering to the patient a therapeutically effective amount of a compound according to claim 1 to inhibit the binding of an amyloid beta peptide with nAChRs.
- 28. (Previously Presented) A method of treating a patient for alcohol withdrawal or treating a patient with anti-intoxication therapy comprising administering to the patient an effective amount of a compound according to claim 1.
- 29. (Previously Presented) A method of treating a patient to provide for neuroprotection against damage associated with strokes and ischemia and glutamate-induced excitotoxicity comprising administering to the patient an effective amount of a compound according to claim 1.
- 30. (Previously Presented) A method of treating a patient suffering from nicotine addiction, pain, jetlag, obesity and/or diabetes, or a method of inducing smoking cessation in a patient comprising administering to the patient an effective amount of a compound according to claim 1.
- 31. (Previously Presented) A method of treating a patient suffering from mild cognitive impairment (MCI), vascular dementia (VaD), age-associated cognitive decline (AACD), amnesia associated with open-heart-surgery, cardiac arrest, general anesthesia,

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memory deficits from exposure to anesthetic agents, sleep deprivation induced cognitive impairment, chronic fatigue syndrome, narcolepsy, AIDS-related dementia, epilepsy-related cognitive impairment, Down's syndrome, Alcoholism related dementia, drug/substance induced memory impairments, Dementia Puglistica (Boxer Syndrome), or animal dementia comprising administering to the patient an effective amount of a compound according to claim 1.

- 32. (Previously Presented) A method of treating a patient suffering from a disease state involving decreased nicotinic acetylcholine receptor activity comprising administering to the patient an effective amount of a compound according to claim 1.
- 33. (Previously Presented) A method for the treatment or prophylaxis of a disease or condition resulting from dysfunction of nicotinic acetylcholine receptor transmission in a mammal comprising administering to the mammal an effective amount of a compound according to claim 1.
- 34. (Previously Presented) A method for the treatment or prophylaxis of a disease or condition resulting from defective or malfunctioning nicotinic acetylcholine receptors in a mammal comprising administering to the mammal an effective amount of a compound according to claim 1.
- 35. (Previously Presented) A method for the treatment or prophylaxis of a disease or condition resulting from suppressed nicotinic acetylcholine receptor transmission in a mammal comprising administering to the mammal an effective amount of a compound according to claim 1.
- 36. (Previously Presented) A method for the treatment or prophylaxis of a disease or condition resulting from loss of cholinergic synapses in a mammal comprising administering to the mammal an effective amount of a compound according to claim 1.

- 37. (New) A method of treating a patient suffering from inflammation comprising administering to the patient an effective amount of a compound according to claim 1.
- 38. (New) A compound according to claim 21, wherein said compound is in the form of a hydrochloride or hydroformate salt.
- 39. (New) A compound according to claim 38, wherein said compound is selected from:
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide hydrochloride,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)benzo[d]isothiazole-3-carboxamide hydrochloride,
- N-(-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide hydrochloride,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide hydrochloride,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-3-carboxamide hydrochloride,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(methoxy)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(cyclopropyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-methoxybenzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-5-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(2-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(4-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-furan-3-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(morpholin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-phenylbenzo[d]isothiazole-3-carboxamide hydroformate,

N-((3*R*)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-3-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(phenyl)-1H-indazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(2-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(3-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(4-fluorophenyl)benzo[d]isothiazole-3-carboxamide hydroformate,

N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)benzo[d]isothiazole-3-carboxamide hydroformate,

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- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(morpholin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-phenylbenzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-3-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(pyridin-4-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)benzo[d]isothiazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(furan-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(phenyl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-2-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-6-(thiophen-3-yl)-1H-indazole-3-carboxamide hydroformate,
- N-((3R)-1-Aza-bicyclo[2.2.2]oct-3-yl)benzothiazole-4-carboxamide dihydrochloride,
- N-((3S)-1-Aza-bicyclo[2.2.2]oct-3-yl)benzothiazole-4-carboxamide dihydrochloride,
- N-((3R)-1-Azabicyclo[2,2,2]oct-3-yl)benzothiazole-7-carboxamide hydrochloride,
- N-((3S)-1-Azabicyclo[2,2,2]oct-3-yl)benzothiazole-7-carboxamide hydrochloride,
- N-((3R)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide hydrochloride, and
- N-((3S)-1-Azabicyclo[2.2.2]oct-3-yl)-1H-indazole-7-carboxamide hydrochloride.
- 40. (New) A compound according to claim 38, wherein said compound is a hydrochloride or hydroformate salt of N-((3R)-1-azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide.
- 41. (New) A compound according to claim 38, wherein said compound is a hydrochloride or hydroformate salt of N-((3S)-1-azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide.

- 42. (New) A compound according to claim 38, wherein said compound is a hydrochloride or hydroformate salt of N-((3R)-1-azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide.
- 43. (New) A compound according to claim 38, wherein said compound is a hydrochloride or hydroformate salt of N-((3S)-1-azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide.
- 44. (New) A compound according to claim 40, wherein said compound is N-((3R)-1-azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide hydrochloride.
- 45. (New) A compound according to claim 41, wherein said compound is N-((3S)-1-azabicyclo[2.2.2]oct-3-yl)-6-methoxybenzo[d]isothiazole-3-carboxamide hydrochloride.
- 46. (New) A compound according to claim 42, wherein said compound is N-((3R)-1-azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide hydrochloride.
- 47. (New) A compound according to claim 43, wherein said compound is N-((3S)-1-azabicyclo[2.2.2]oct-3-yl)-7-methoxybenzo[d]isothiazole-3-carboxamide hydrochloride.